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# NOTICE OF ALLOWANCE AND FEE(S) DUE

27846

7590

RAMBUS INC. 4440 EL CAMINO REAL LOS ALTOS, CA 94022

02/11/2004

**EXAMINER AUVE, GLENN ALLEN ART UNIT** PAPER NUMBER

2111

DATE MAILED: 02/11/2004

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/835.263      | 04/13/2001  | Michael Farmwald     | RA043D2C15          | 6612             |

TITLE OF INVENTION: MEMORY DEVICE HAVING A PROGRAMMABLE REGISTER

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE | PUBLICATION FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|-----------|-----------------|------------------|------------|
| nonprovisional | NO           | \$1330    | \$300           | \$1630           | 05/11/2004 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### **HOW TO REPLY TO THIS NOTICE:**

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- ☐ Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

# PART B - FEE(S) TRANSMITTAL

(a)

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (703) 746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

| indicated unless corre-<br>maintenance fee notific  |   | directed otherwise i  | n Block 1, by (a) specifying  | ng a new correspondence add  | ress; and/or (b) indicating a sepa   | rate "FEE ADDRESS" for   |  |
|---|---|---|---|--|--|--|--|
| CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)  |   |   | Fee(s) Transmittal  | Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must |  |  |  |
| 27846   | 7590  | 02/11/2004  |   | have its own certif  | ficate of mailing or transmission.   |  |  |
| RAMBUS IN<br>4440 EL CAM<br>LOS ALTOS,  | INO REAL  | •   |   | States Postal Servi  | Certificate of Mailing or Translat this Fee(s) Transmittal is bein ice with sufficient postage for fir Mail Stop ISSUE FEE address USPTO, on the date indicated below. | g deposited with the United st class mail in an envelope above, or being facsimile |  |
|   |   |   |   |  |  | (Depositor's name)   |  |
|   | ,   |   |   |  |  | (Signature)  |  |
|   |   |   |   |  |  | (Date)   |  |
| APPLICATION NO  | . FI  | LING DATE   | FIRST NA  | MED INVENTOR   | ATTORNEY DOCKET NO.  | CONFIRMATION NO.   |  |
| 09/835,263  |   | 04/13/2001  | Micha   | ael Farmwald   | RA043D2C15   | 6612   |  |
| •   | N: MEMORY   | DEVICE HAVING   | A PROGRAMMABLE RI   | EGISTER  |  |  |  |
|   | •   |   |   |  |  |  |  |
|   |   |   |   | ·  |  | DATE DIE   |  |
| APPLN. TYPE   | SM  | ALL ENTITY  | ISSUE FEE   | PUBLICATION FEE  | TOTAL FEE(S) DUE   | DATE DUE   |  |
| nonprovisional  |   | NO  | \$1330  | \$300  | \$1630   | 05/11/2004   |  |
|   | EXAMINER  |   | ART UNIT  | CLASS-SUBCLASS   |  |  |  |
| AUVE  | , GLENN ALL   | EN  | 2111  | 710-305000   |  |  |  |
| Address form PTO/  "Fee Address" in PTO/SB/47; Rev 03 Number is require  3. ASSIGNEE NAME PLEASE NOTE: Ubeen previously sub (A) NAME OF ASS   | pondence addr SB/122) attach dication (or "F 3-02 or more re d.  AND RESIDE nless an assign mitted to the USIGNEE  priate assignees s) are enclosed | eess (or Change of Coned.  ee Address" Indicative ecent) attached. Use  ENCE DATA TO BE  nee is identified belous proposed to be a second attached.   | names agents firm (I agent) attorne will be experience.  E PRINTED ON THE PATION, no assignee data will appropriate under separate cov (B) RESIDE (B) RESIDE A cheese Paymen A cheese Paymen The II | ppear on the patent. Inclusion ver. Completion of this form is ENCE: (CITY and STATE OR the patent); individual at of Fee(s): ck in the amount of the fee(s) is ent by credit card. Form PTO-2 Director is hereby authorized by          | of assignee data is only appropri NOT a substitute for filing an ass COUNTRY)  corporation or other private g s enclosed.  corporate the required fee(s), or           | roup entity  |  |
| Director for Patents is   | requested to ap   | oply the Issue Fee an   |   | Account Numberor to re-apply any previously page   | aid issue fee to the application ide   |  |  |
| (Authorized Signature)  | )   | · <u>·········</u>  | (Date)  |  |  |  |  |
| other than the appli-   | cant; a registe   | red attorney or age   | d) will not be accepted front; or the assignee or othernt and Trademark Office.   | er party in  |  |  |  |
| obtain or retain a be application. Confider estimated to take 12 completed application case. Any comment suggestions for redu Patent and Tradem 22313-1450. DO N SEND TO: Commissions | mefit by the partiality is governmented to common form to the son the amount of the cing this burder of SEND Fluioner for Pater of Reduction        | ublic which is to fil rned by 35 U.S.C. 12 mplete, including gas USPTO. Time will ount of time you reen, should be sent to U.S. Department of EES OR COMPLETES, Alexandria, Virguals, Act of 1995, no p | ersons are required to res  | process) an collection is emitting the cindividual corm and/or fficer, U.S. ADDRESS.   |  |  |  |



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UNITED STATES DEPARTMENT OF COMMERCI United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

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| 09/835,263                                 | 09/835,263 04/13/2001 |            | Michael Farmwald                           | RA043D2C15              | 6612                |                  |
| 27846                                      | 7590                  | 02/11/2004 |  | EXAM                    | INER                |                  |
| RAMBUS INC.                                |                       |            | AUVE, GLENN ALLEN                          |                         |                     |                  |
| 4440 EL CAMINO REAL<br>LOS ALTOS, CA 94022 |                       | <u>.</u>   | ·  | ART UNIT                | PAPER NUMBER        |                  |
| ·  |                       |            |  | 2111                    | 19                  |                  |
| -  |                       |            |  | DATE MAILED: 02/11/2004 | 1 7                 |                  |

#### Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 419 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 419 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

|  | Application No.  | Applicant(s)  |
|--|--|---|
|  | 09/835,263   | FARMWALD ET AL.   |
| Notice of Allowability   | Examiner   | Art Unit  |
|  | Glenn A. Auve  | 2111  |
| The MAILING DATE of this communication app<br>All claims being allowable, PROSECUTION ON THE MERITS Is<br>herewith (or previously mailed), a Notice of Allowance (PTOL-85<br>NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT<br>of the Office or upon petition by the applicant. See 37 CFR 1.37   | S (OR REMAINS) CLOSED in 5) or other appropriate common RIGHTS. This application is a                            | n this application. If not included unication will be mailed in due course. <b>THIS</b>   |
| 1. This communication is responsive to the amendment file  | <u>d 11/13/2003</u> .  |   |
| 2. The allowed claim(s) is/are 151-210.  |  |   |
| 3. The drawings filed on 13 April 2001 are accepted by the   | Examiner.  |   |
| <ul> <li>4. Acknowledgment is made of a claim for foreign priority a)</li> <li>a) All b) Some* c) None of the:</li> <li>1. Certified copies of the priority documents have</li> <li>2. Certified copies of the priority documents have</li> <li>3. Copies of the certified copies of the priority documents have</li> <li>International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> <li>Applicant has THREE MONTHS FROM THE "MAILING DATE noted below. Failure to timely comply will result in ABANDON THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.</li> </ul> | ve been received.  ve been received in Application  ocuments have been receive  "" of this communication to file | on No  d in this national stage application from the  |
| 5. A SUBSTITUTE OATH OR DECLARATION must be sub-<br>INFORMAL PATENT APPLICATION (PTO-152) which gi   | mitted. Note the attached EXA<br>ves reason(s) why the oath o  | AMINER'S AMENDMENT or NOTICE OF declaration is deficient.   |
| 6. CORRECTED DRAWINGS (as "replacement sheets") mo   | ust be submitted.  |   |
| (a) including changes required by the Notice of Draftspe   | •  | v ( PTO-948) attached   |
| 1)  hereto or 2)  to Paper No./Mail Date   | <del>_</del>   |   |
| (b) including changes required by the attached Examine<br>Paper No./Mail Date  | r's Amendment / Comment or   | r in the Office action of   |
| Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in   | 1.84(c)) should be written on the header according to 37 CF  | he drawings in the front (not the back) of R 1.121(d).  |
| 7. DEPOSIT OF and/or INFORMATION about the department attached Examiner's comment regarding REQUIREMENT  | OSIT OF BIOLOGICAL MATE<br>FOR THE DEPOSIT OF BIO  | ERIAL must be submitted. Note the DLOGICAL MATERIAL.  |
| Attachment(s)  1. □ Notice of References Cited (PTO-892)  2. □ Notice of Draftperson's Patent Drawing Review (PTO-948)   |  | formal Patent Application (PTO-152)   |
| <ul> <li>3. Information Disclosure Statements (PTO-1449 or PTO/SB Paper No./Mail Date 16</li> <li>4. Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul>  | Paper No./<br>/08), 7. 🔲 Examiner's  | ummary (PTO-413), 'Mail Date Amendment/Comment  Statement of Reasons for Allowance  Glenn A. Auve Primary Examiner Art Unit: 2111 |

Application Number: 09/835,263

Art Unit: 2111

#### **REASONS FOR ALLOWANCE**

- 1. Applicant's preliminary amendment originally filed on December 11, 2001, which added claims 198-210 was never matched with the case and hence was not considered in the First Office Action. These claims have now been examined.
- 2. The following is an examiner's statement of reasons for allowance: As previously noted, independent claims 151,163, and 186 include limitations directed to the use of a programmable register in the memory device which stores a value that indicates an amount of time to transpire before the memory outputs data, the value stored in the register in response to a first operation code; and the output driver circuitry outputting a first portion of the data synchronous to a first transition of the clock signal and a second portion of the data synchronous to a second transition of the clock signal. This combination of limitations does not appear to be present in the prior art and would not have been obvious.

Independent claims 176 and 198 include limitations directed to a first operation code initiating access to the programmable register to store a binary value which is stored in response to the first operation code, in combination with the memory device outputting a first portion of the data synchronous to a first transition of the clock signal and a second portion of the data synchronous to a second transition of the clock signal. This combination of limitations does not appear to be present in the prior art and would not have been obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application Number: 09/835,263

Art Unit: 2111

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn A. Auve whose telephone number is (703) 305-9638. The examiner can normally be reached on M-Th 8:00 AM-5:30 PM, every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703) 305-4815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Glenn A. Auve Primary Examiner Art Unit 2111

gaa February 10, 2004